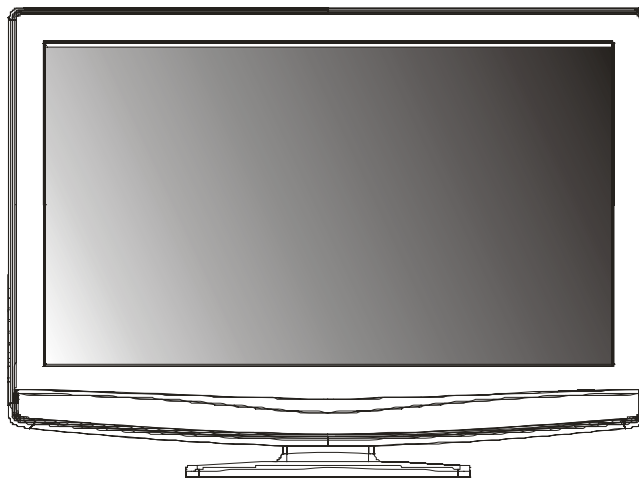


# SERVICE MANUAL

## 8M39A/E CHASSIS



Design and specifications are subject to change without prior notice.  
(Only Reference)

SIZE:A5

Description: SERVICE MANUAL 8M39A/E	
MODEL.	Brand Name:
JOB NO.	SKYWORTH
Engineering Dept:	
Artwork By:	Date: 2010-8-17
Checked By:	Date:
Approved By:	Date:

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# Technical Specification

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## 1.Application Area:

This product standard is used for LCD 8M39A/E chassis.

## 2.Specification:

All the standard are measured under following conditions without other specification.

2.1 Ambient Temperature:20+/-5°C

2.2 Relative Humidity:65+/-10%

2.3 Power Supply Voltage: Standard Input Voltage(100V~240Vac 50/60Hz)

2.4 Adjust after 20 minutes warm-up.

## 3.Test and check method:

3.1 Capability:According to nation test standard

3.2 Safety:\_\_\_\_\_ standard

EMC:\_\_\_\_\_ standard

# Technical Specification

## 6. Safety and Regulation

No	Item	Min	Typ	Max	Unit	Remark
1.	Force Stability – Incline Plane Tip Test		10		deg	
2.	Force Stability – Level Tip Test		100		N	
3.	Isolation Gap, AC-AC/ AC-DC	3			mm	
4.	Isolation Gap	6			mm	
5.	Power Consumption, Max		70		W	For 22LED
			90		W	For 24LED
			120		W	For 32LCD
6.	Power Consumption, Stand by			1	W	
7.	Dielectric Voltage	3			kV	
8.	Isolation Resistance	4			M $\Omega$	
9.	Leakage Current		5		mApp	
10.	Power Cord Captivity		40		N	
11.	Flammability – Back Cover		PASS			
12.	Sharp Edge		PASS			
13.	UL Compliance		NO			
14.	FCC Compliance		NO			
15.	CDRH Radiation Compliance		NO			
16.	CSA Compliance		NO			
17.	CEB Compliance		NO			
18.	CE Compliance		NO			
19.	CB Compliance		YES			

## 7. Video

No	Item	Min	Typ	Max	Unit	Remark
1.	Linearity Distortion, Vertical		1		%	
2.	Linearity Distortion, Horizontal		1		%	
3.	Trapezoidal Distortion, Vertical		1		%	
4.	Trapezoidal Distortion, Horizontal		1		%	
5.	Over Scan, Vertical	90	93	95	%	
6.	Over Scan, Horizontal	90	93	95	%	
7.	Brightness, Maximum		250		cd/m <sup>2</sup>	For 22LED
			300		cd/m <sup>2</sup>	For 24LED
			350		cd/m <sup>2</sup>	For 32LCD
8.	Video Noise Limited Sensitivity(@S/N=30db) VHF			51	dBV	
9.	Video Noise Limited Sensitivity(@S/N=30db) UHF			54	dBV	

# Technical Specification

10.	Selectivity -1.5M	35			dB	
11.	Selectivity +8M	40			dB	
12.	Tuning Range	-0.7			MHz	
13.	Resolution Horizontal		1366		Lines	1920 For (32LCD)
14.	Resolution Vertical		768		Lines	1080 For (32LCD)

## 8. Chroma

No	Item	Min	Typ	Max	Unit	Remark
1.	White Balance, X axis		280			
2.	White Balance, Y axis		290			
3.	White Balance, Color Temperature	6500	9300	13000	kdeg	13000kdeg(268,273) 9300(281,311) 6500(313,329)
4.	Color Sensitivity		30		dB	
5.	Color Burst Lock-in Range	+/-300			Hz	
6.	Color Killer Sensitivity		30		dBuv	

## 9. Audio

No	Item	Min	Typ	Max	Unit	Remark
1.	Audio Noise Limited Sensitivity, VHF-L		25		dBuv	
2.	Audio Noise Limited Sensitivity, VHF-H		25		dBuv	
3.	Audio Noise Limited Sensitivity, UHF		28		dBuv	
4.	Buzz (S/N Ratio)		40		dB	
5.	Distortion		3		%	
6.	Audio Output, L/R,at 10% THD		10		W	
7.	Audio Output, Center		10		W	
8.	Stereo Separation		21		dB	
9.	Speaker Impedance		8		ohm	(22" 24" is 4 ohm)
10.	Speaker Power Rating		5	8	W	(22" 24" is 3W x 2)

# Technical Specification

## 10. Power

No	Item	Min	Typ	Max	Unit	Remark
1.	DC Voltage, Audio		24		V	22" 24" is 12V
2.	DC Voltage, Tuner(5)		5		V	

## 11. External Interface

No	Item	Min	Typ	Max	Unit	Remark
1.	Video Input Level		1		Vpp	75 OHM
2.	Video Input Frequency Response	4.5			MHz	
3.	Video Input S/N		40		dB	
4.	Audio Input Level		0.5		Vrms	
5.	Audio Input Frequency Response			15	kHz	
6.	Audio Input S/N		40		dB	
7.	Audio Input Distortion		3		%	
8.	Audio Input Dynamic Range			2	V	
9.	Video Output Level		1		Vpp	
10.	Video Output Frequency Response		4.2		MHz	
11.	Video Output S/N		50		dB	
12.	Audio Output Level		0.5		Vrms	
13.	Audio Output Frequency Response	80		12000	Hz	
14.	Audio Output S/N		40		dB	
15.	Audio Output Distortion		6		%	

# Technical Specification

16.	Video Input Level, R/G/B		0.7		Vpp	
17.	Video Input Level, Component(Y, P <sub>B</sub> , P <sub>R</sub> )		0.7		Vpp	75 ohm
18.	RGB Input Resolution, Vertical		768		pixel	1080
19.	RGB Input Resolution, Horizontal		1366		pixel	1920
20.	RGB Input Horizontal Frequency		68		kHz	
21.	RGB Input Frame Rate		60		Hz	

## 12. The others

No	Item	Min	Typ	Max	Unit	Remark
1.	Search Sensitivity		40		dBuv	
2.	Clock, real time gain or loss (sec per day)		NO		sec	
3.	Soft Ware Functionality Test		YES			
4.	REMOCON Working Sensitivity, Straight		8		m	
5.	REMOCON Working Sensitivity, T/B/L/R		6		m	
6.	Closed Caption Sensitivity		46		dBuv	
7.	Teletext Sensitivity		46		dBm	
8.	Resonance of unit (Sweep freq : 50 ~ 1000)		NO			

## 13. Customer Menu Setup (as shipped condition)

No	Item	Specification	Remark
1.	PSM	Standard	
2.	SSM	Standard	
3.	Volume	20	
4.	Mute	Off	
5.	Input Mode	RF	
6.	Customer Menu Language	English	
7.	AVL	Off	
8.	Sleep Timer	Off	
9.	Auto Sleep	Off	
10.	Blue Back	Off	
11.	Surround	Off	
12.	Caption	Off	
13.	Noise Reducer	Middle	

# Technical Specification

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## 14. Reliability

No	Item	Min	Typ	Max	Unit	Remark
1.	ESD			4	kV	IEC-1000-4-2
2.	EFT/Burst			2	kV	IEC-1000-4-4
3.	Surge Immunity			4	kV	IEC-1000-4--5
4.	Voltage Dip Test, 10ms	0	40	70	%	IEC-1000-4-11
5.	Voltage Dip Test, 100ms	0	40	70	%	IEC-1000-4—11
6.	Operation Temperature	0		40	deg	
7.	Operation Humidity	40		85	%	
8.	Storage Temperature	-20		50	deg	
9.	MTBF (Confidence Level : 90 %)		30000		hour	



## ATV/DTV-PRODUCTI0 NS SPECIFICATION

Model #	19"~26" LED 32LCD	
Country ( West Eu../Russia/AP/US/S.A...)	Australia	Europe
Brand	Skyworth	Skyworth
Category (Monitor/TV/Combo/Portable TV...)	TV	TV
Panel technology (LCD / PDP/LED)	LCD / LED	LCD / LED
Market Position (High/Mid/Access,,)	Class	Class
Cabinet Design (Example: 01,23 series )	32S16/24E60/22E60/19E61	32S16/24E60/22E60/19E61
Chassis solution	MSD306	MSD306
Chassis name	8M39A	8M39E
Chassis PCB Standard	Skyworth RGB New Standard	Skyworth RGB New Standard
MP date	2010.9	2010.9
Chassis BOM Costing Target	17. 5USD	18USD
Built-in Power supply BOM Costing Target	-	-
<b>Regional requirement</b>		
Homologation (Gostandard/CE/MPTT/CB/...)	CB /EMC	CB /EMC
Rohs	yes	yes
Power supply(AC +10/-20%/...)	100-240V AC (-20%,+10%)	100-240V AC (-20%,+10%)
Power consumption working	-	-
Power consumption standby	<1W	<1W
Power plug(VDE/UL/BS/...)	SAA/3 pins	SAA/3 pins
<b>Picture display</b>		
Screen size (inch)	19",22", 24",26",32"	19",22", 24",26",32"
Aspect ratio (16/9 // 4/3 // 15/9)	16:9	16:9
Color depth of chassis (8/10/12 bits)	10bits	10bits
1st panel supplier : panel suppliers	Skyworth	Skyworth
1st panel supplier : panel Model	24inch	24inch
Panel Display Type(MVA/PVA/IPS/...)	TFT LCD	TFT LCD
1st panel supplier : resolution	1920x1080	1920x1080
1st panel supplier : pixel Pitch (mmxmm)		
1st panel supplier : Horizontal and vertical viewing angle		
1st panel supplier : Typical response time (Grey to Grey)		
1st panel supplier : Typical response time (tr+tf)		
1st panel supplier : Peak white luminance (Nits)		
1st panel supplier : Contrast ratio		
1st panel supplier : Typical panel Life Time (Hours)		
<b>Picture signal process</b>		
Comb Filter (2D/3D)	3D	3D
Noise Reduction (adaptative/3D/...)	3D	3D
Picture improvement ( LTI/CTI,BLE,WLE,...)	LTI/CTI	LTI/CTI
Color process (Gama correction/Skin correction /.. )	Follow main IC	Follow main IC
Colour preset (Cool/Normal/Warm/Personal)	Neutral, Cool, Warm and Personal in PC mode	Neutral, Cool, Warm and Personal in PC mode
Picture control ( Bright/Con./Sharpness/Color/Tint/..)	Yes	Yes
Picture presets : Standard / Bright / Soft / User	Personal/Mild/Dynamic/Standard	Personal/Mild/Dynamic/Standard
Picture freeze	yes (Hold)	yes (Hold)

## ATV/DTV-PRODUCT IONS SPECIFICATION

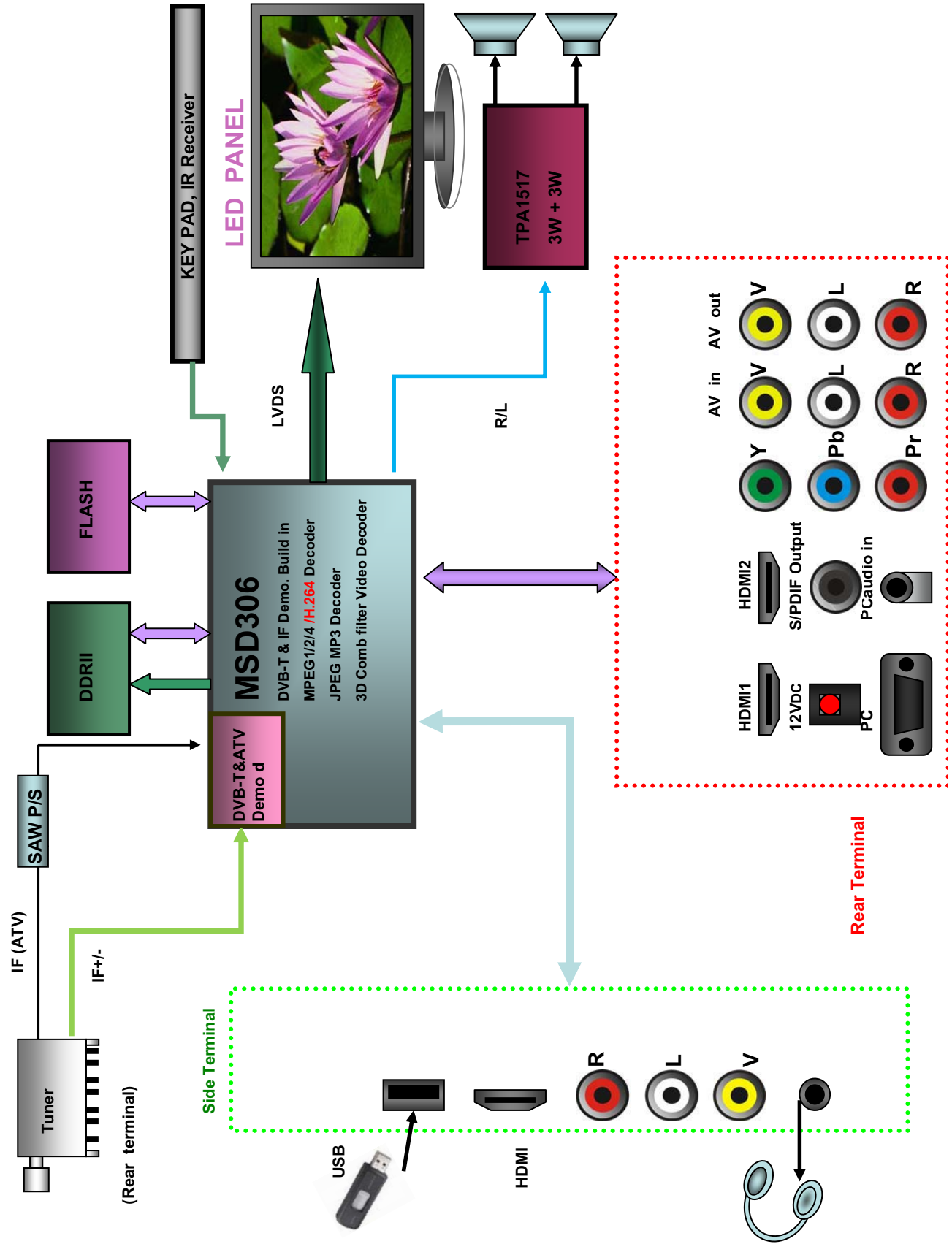
Multi picture : PIP/POP ( AV )	No	No
Dynamic Backlight Control	yes	yes
Deinterlacer (No/linear/motion adaptive/motion compensative)	3D motion adaptive	3D motion adaptive
Film mode / reverse 3:2/2:2 pull down	Yes / Yes	Yes / Yes
Full HD support ( 1080P )	yes	yes
Single scan / Dual scan ( 120HZ )	no	no
16/9 autoformat (black bars canceller)		
Zoom type : 4/3 format	Yes	Yes
Zoom type : 14/9 Zoom	<b>NO</b>	<b>NO</b>
Zoom type : 16/9 Zoom	16/9 ZOOM 1	16/9 ZOOM 1
Zoom type : 16/9 Zoom up/down	16/9 ZOOM 2	16/9 ZOOM 2
Zoom type : Cinerama	Yes	Yes
Zoom type : 16/9 Format	Yes	Yes
Zoom type : Auto ( by SCART Pin8 and WSS )	No	No
Picture Auto adjustment (PC mode)	Yes	Yes
<b>Sound</b>		
Sound type ( AV stereo/Stereo/NICAM/MTS )	AV stereo	
Music Power (Watt)/RMS Power (Watt)	2 x 3W (24' ) ,2 x 5W (32' )	2 x 3W (24' ) ,2 x 5W (32' )
Tone control ( Bass&Treble / Graphic Equalizer )	Bass&Treble	Bass&Treble
Special sound effect ( AVL / WIDE / Pseudo / ... )	AVL	AVL
Surround system ( Dolby / VD / SRS / BBE / ... )	Built-in Surround	Built-in Surround
Sound control ( Volume , Balance , Mute )	Volume, Balance, Mute	Volume, Balance, Mute
Sound presets (User/Speech/News/Standard)	Standard / Music / Sports / Movie / Personal	Standard / Music / Sports / Movie / Personal
Headphone volume control ( Separated / linked )	<b>Yes</b>	<b>Yes</b>
<b>Reception and Decoding capability</b>		
RF range (ATV)	44.25MHz~863.25MHz	44.25MHz~863.25MHz
RF range (DTV)	177.5MHz~809.5MHz	177.5MHz~809.5MHz
Tuner Input(IEC or F)		
Color System (PAL/SECAM/NTSC/PAL M,N )	PAL/SECAM	PAL/SECAM
Audio Standard ( B/G/H/D/K/K'/I/L/L' )	BG / DK / I / L	BG / DK / I / L
Video standard NTSC 3.58 / 4.43 (AV)/PAL 60	PAL 4.43	PAL 4.43
DTV support (DVB-T/S/C , ATSC , QAM , ... )	DVB-T	DVB-T
HD capability with YPbPr	Yes (720p; 1080i; 1080p@24/50/30Hz; 480i/p; 576i/p)	Yes (720p; 1080i; 1080p@24/50/30Hz; 480i/p; 576i/p)
PC capability (up to maximum format)	Up to 1280X1024 60Hz	Up to 1280X1024 60Hz
HDMI capability ( AV/PC Format)	Up to 1080P 24/50/60HZ	Up to 1080P 24/50/60HZ
Compatible video format if DVD/USB: DviX/VCD/SVCD/JPEG/AVI/MPEG2/WMV- HD/SD	JPEG/MPEG2/MPEG4/RMVB/H.264/DivX (depending on license)	JPEG/MPEG2/MPEG4/RMVB/H.264/DivX (depending on license)
Compatible audio format if DVD/USB: MP3/WMA/AAC/MPEG1/...		
Macrovision	yes	yes
<b>User convenience</b>		
OSD Language*	English	English
OSD Transparency Adjust	no	no
OSD Timeout Adjust	no	no

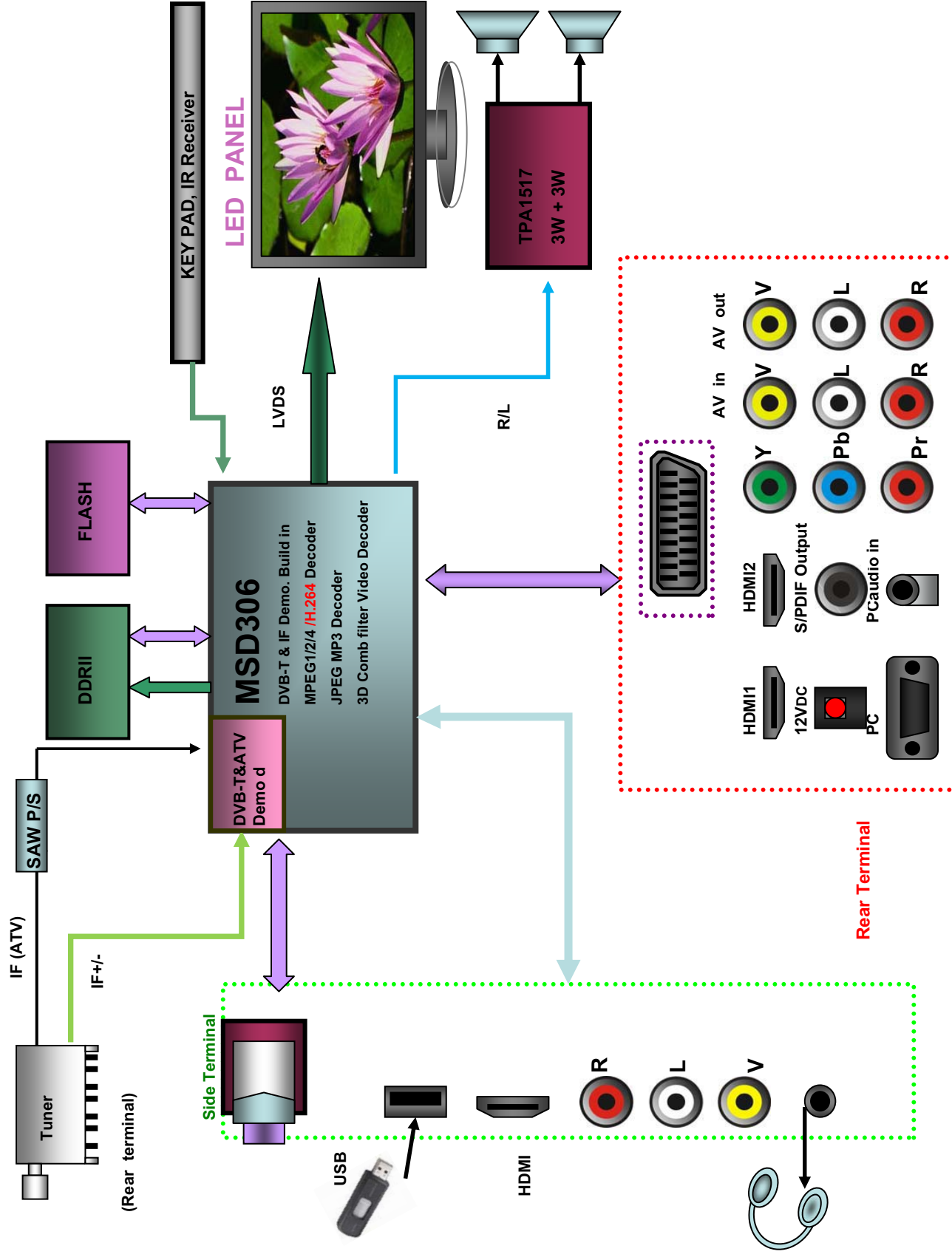
## ATV/DTV-PRODUCTIIONS SPECIFICATION

Customer Brand name(LOGO)	yes	yes
IB languages	English	English
Program Numbers (example: 99+3AV input )	99+7AV	99+7AV
Program edit ( naming , sorting , skip , swap .... )	Naming / Skip / Swap	Naming / Skip / Swap
Favorite program	yes	yes
Number of buttons on cabinet (Power; Vol+/-; Pr+/-, Menu )	Vol+/-; Pr+/-, Menu ,Source,Power(optional)	Vol+/-; Pr+/-, Menu ,Source,Power(optional)
Main switch button (yes/No)		
CCD (Closed Caption)/ V-CHIP	no	no
Text Standard: (Top, FLOF,,,)		
Teletext Level: 2.5 / 1.5		
Pages for teletext		
Teletext character sets ****		
Sleep timer	10-240 Min.	10-240 Min.
Calendar / Games	no	no
Parent Control - Child lock (set the lock of the keyboard, only the RCU can control the TV)	no	no
No program auto switch off	no	no
Auto update (for DVBT program upgrades)		
Hotel mode (Y/N)	Optional	Optional
Software download(RS232/CI/USB/OAD)	USB	USB
Factory reset	Yes (in factory menu,reset the setting to shipment state )	Yes (in factory menu,reset the setting to shipment state )
Quick view	yes	yes
Screen saver	yes	yes
Blue Back	yes	yes
LED indicator(Power on/Standby)	yes	yes
<b>Connectors -Rear</b>		
RF Input (Antenna): Analogical / Digital / 2in1	1 tuner	1 tuner
CINCH video in / out	RCA	RCA
CINCH audio in / out	RCA	RCA IN
Scart : CVBS in&out	no	yes
S-video in	no	no
Component Video Input (YCrCb/YPrPb)	yes	yes
Component Audio Input (YCrCb/YPrPb)	yes	yes
VGA in / Audio L/R in / Jack audio in 3.5mm	VGA + dia. 3.5mm for audio in	VGA + dia. 3.5mm for audio in
HDMI	2	2
Audio input for DVI	same as VGA	same as VGA
CINCH subwoofer out / Coaxial out (S/PDIF)	yes	yes
Headphone output connector (dia.mm)	no	no
USB slot (No/1.1/2)	no	no
DVBC-I (common interface)	no	no
External power converter input	yes	yes
<b>Connectors -Side</b>		
HDMI	1	1
CINCH video in	RCA	RCA
CINCH audio in	RCA	RCA
S-video in	no	no

## ATV/DTV-PRODUCT 10 NS SPECIFICATION

Component Video Input (YCrCb/YPrPb)	no	no
Component Audio Input (YCrCb/YPrPb)	no	no
Headphone output connector (dia.mm)	yes	yes
USB slot (No/1.1/2)	1 (Software update, JPEG, MP3, WMA, RMVB, DivX) Multimedia depends on license	1 (Software update, JPEG, MP3, WMA, RMVB, DivX) Multimedia depends on license
<b>UI/RC</b>		
UI design (font/pixel, 2D/3D graphic engine..)	SOD Standard	SOD Standard
RC Model	YK76HG	YK76HG
RC system	RGB Standard	RGB Standard
RC # of keys		
<b>Accessories included</b>		
Remote control reference	English	English
IB	English	English
Circuit diagram	No	No
Batteries	yes	yes
AC power cords	Optional	Optional
AC Cable Length	1.5m	1.5m
Wallmount frame	Optional	Optional
<b>General Data</b>		
Size (W x H x D, with stand) in mm	-	
Size (W x H x D, without stand) in mm	-	
Package Size (W x H x D, without stand) in mm	-	
Net Weight in kg	-	
Gross Weight in Kg	-	
<b>Design / Mechanical</b>		
Wallmount VESA compatible (standard reference)		
Adaptor for VESA wallmount compatibility (accessory ref)		
Desktop Stand (included/optionnal + ref/No)		
Finish on Front		
Finish on side		
Finish on back		
Finish on stand		





list of long-time components and materials

NO	Component		Manufacturer / trademark	Type/model	Value / rating	P/N	Approval / Referen ce	
1	IR	PT1		HS0038**		5300-140038-0010		
2	Speaker							
3	Crystal	Y1	Shanxi yijiayi	HC-49S		4900-124052-05		
4	Tuner	U10A1	Chengdu xuguang	DTT-1081C/GW12B5		5221-389560-0H00		
5	Saw-filter	U30	Ningxia suoteke	HS3611		4900-736115-0X00		
6	All IC	U2	MSTAR	MSD306PT-LF-SG		475C-M30600-3840		
		U9	ELPIDA	EDE5116AJBG-8E-E		478M-E51161-0840		
		U24	CFEON	EN25B64-100FIP		471R-N25640-0160		
		U31	TEXAS/ EUTECH	TPA3113D2 / EUA2113				
		U7	Shenzhen Da yan	LM4558		47DG-G45580-0080		
		U49/ U50	MPS	MP1482DS		476A-M14820-0080		
		U5	Shenzhen Da yan	LM358		47DG-G35800-0080		
		U18	Shenzhen Da yan	LM78D05		47DG-G78051-0030		
		U37	A1 semiconductor	AS1117L-3.3		47B6-A11170-03		
		U38	A1 semiconductor	AS1117L-3.3		47B6-A11170-03		
		U36 /39	A1 semiconductor	AS1117L-1.8		7B6-A11172-03		
		U36	A1 semiconductor	AS1117L-ADJ		47B6-A11174-0300		
		Q33/3 4/35	A1 semiconductor	ASM3403				
		U1	INFINITRUE	IT2418		47AE-T24180-0320		

## List of key parts

14	TABLE: list of critical components and materials				P
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Approval/ Reference
Mains plug (EU type)	Shenzhen Deren Electronic Co., Ltd.	RVVZ-2P	AC250V 2.5A		40008180
	Shen Zhen Xie Kang Electric Co., Ltd	XK-01	AC250V 2.5A		40009009
Mains plug (UK type)	KDJ Quality Electrcal Company Ltd	KDJ 828	3/5/7/10/13A 250V		KM54583
Mains plug (AU type)	Shenzhen Deren Electronic Co., Ltd.	DR-209	AC250V 7.5A/10A		<b>Q03980</b>
	Shen Zhen Xie Kang Electric Co., Ltd	XK-15	3A 250V~		<b>N21010</b>
Mains plug (BR type)	Shenzhen Deren Electronic Co., Ltd.	DR-206	AC250V 10A		07/UL-BRAB- 0016
	Shen Zhen Xie Kang Electric Co., Ltd	XK-09	2.5A 250V~ /10A 250V~		MC.DPC-861 6
Power plug (AR type)	Shenzhen Deren Electronic Co., Ltd.	DR-212	AC250V 10A		DC-E-S160-0 01.2(M1)
	Shen Zhen Xie Kang Electric Co., Ltd	XK-19	AC250V 10A		ICU-S8-001.1
	Shen Zhen Xie Kang Electric Co., Ltd	XK-20	AC250V 10A		ICU-S8-001.2
Power plug SASO	Shenzhen Deren Electronic Co., Ltd.	DR-301	AC250V 13A		SASO 2203:2003
Power cord	Shenzhen Tongyuan Ind. Co., Ltd	H03VVH2-F	2x0.75mm2		101980
Power cord	Shenzhen Bao Hing Electric Wire and Cable Manufacture Co., Ltd.	H03VVH2-F	2x0.75mm2		103727
Power cord	Shenzhen Xiekang Electric Co., Ltd.	H03VVH2-F			40029225
Power cord	Mainland Electric Wire & Cable Co., Ltd	H03VVH2-F			40010355



## List of key parts

14	TABLE: list of critical components and materials					P
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Approval/ Reference	
Power cord (AU type)	Shenzhen Bao Hing Electric Wire and Cable Manufacture Co., Ltd.	LTSA-2F V-75	2x0.75mm2		14586	
	Mainland Electric Wire & Cable Co., Ltd	H03VVH2-F	2x0.75mm2		N20609	
Power cord (BR type)	Shenzhen Tongyuan Ind. Co., Ltd	HO3VVH2-F	2x0.75mm2		MC-FCV-2704	
	Shenzhen Bao Hing Electric Wire and Cable Manufacture Co., Ltd.	HO3VVH2-F	2x0.75mm2		MC-FCV-3662	
	Shen Zhen Xie Kang Electric Co., Ltd	IEC52 RVV 300/300V	2X0.5-0.75		MC,FCVT-87 77	
	Shen Zhen Xie Kang Electric Co., Ltd	IEC53 RVV 300/500V	2X0.75		MC,FCVT-87 79	
Switch	Zhejiang taikang Electronics Co. Ltd.	KND3	250V, 10A		40011140	
	Zhejiang yangkang Electronics Co. Ltd.	KDC-G04	250V, 10A/80A		40021742 E313930	
Material of Switch	BASF Corp Polymers Div	A3X2G5	V-0, 120°C	IEC 60707	E36632	
Insulation tube wrapping switch	? ?					
Primary lead wire	? ?					
LCD panel	LG Display Co.,Ltd	LC320WXE LC320WXN				
	Skyworth LCD Modules (Shenzhen) Ltd	S3150TLA				
	Skyworth LCD Modules (Shenzhen) Ltd	S3150TLB				

## List of key parts

14	TABLE: list of critical components and materials				P
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Approval/ Reference
Main board	Various	Various	V-0, 105°C min.	UL 94 IEC 60707	S, ETL, UL & other EU Cert. marks
Plastic material of enclosure	Kingfa Sci. & Tech Co., Ltd	FRHIPS-113, FRHIPA-960	V-0, 50°C, Min. 1,7 mm thickness	IEC 60707	Tested with appliance
Plastic material of enclosure (alternative)	Cherl Industries Inc. Chemicals Div	VE-1877+	V-0, 50°C, Min. 1,7 mm thickness	IEC 60707	Tested with appliance
Plastic material of enclosure (alternative)	LG Chemical Ltd	40AFC, 405AF	V-0, 50°C, Min. 1,7 mm thickness	IEC 60707	Tested with appliance
AC connector CN1	Young Yak Enterprise Co., Ltd.	YY-2800	250Vac/7A		E182481
	Zhejian Jinda Electronics Co., Ltd.	3.96T	250Vac/7A		E237523
	Cvilux Corporation	CI52	250Vac/7A		E159616
Fuse F1	Hollyland Co., Ltd.	32S	T3.15AL250Vac		40011830
Alternate	Walter Electronic Co. Ltd.	ICP	T3.15AL250Vac		40012824
Insulation tube wrapping F1					
X Capacitor CX1	Shenzhen Jinghao Capacitor Co., Ltd.	CBB62B	0.47uF, 280Vac;		40018690
Alternate	Xiamen Faratronic Co., Ltd.	MKP62	0.47uF, 275Vac;		40000358
Alternate	Europtronic (Taiwan) Ind. Corp.	MPX	0.47uF, 275Vac;		40018238
Alternate	Europtronic (Taiwan) Ind. Corp.	MPX2	0.47uF, 275Vac;		40025981
Alternate	Shenzhen Su Rong Capacitors Co., Ltd.;	MPX	0.47uF, 280Vac;		40008924
Y capacitor CY3,CY4	Yinan Don's Electronic Component Co.,Ltd.	CT81	470pF,250Vac		135256

## List of key parts

14	TABLE: list of critical components and materials				P
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Approval/ Reference
Alternate	Shantou High-New Technology Development Zone Songtian Enterprise Co., Ltd.	CD.	470pF,400Vac;		40025754
Alternate	Walsin Technology Corp	AH	470pF,400Vac;		40001804
Alternate	TDK-EPC Corporation, Capacitors Group Circuit Devices Business Group	CD	470pF,250Vac		124321
Y capacitor CY2	Yinan Don's Electronic Component Co.,Ltd.	CT81	1000pF,250Vac		135256
Alternate	Shantou High-New Technology Development Zone Songtian Enterprise Co., Ltd.	CD.	1000pF,400ac		40025754
Alternate	Walsin Technology Corp	AH	1000pF,400Vac;		40001804
Alternate	TDK-EPC Corporation, Capacitors Group Circuit Devices Business Group	CD	1000pF,250Vac		124321
Y capacitor CY1	Yinan Don's Electronic Component Co.,Ltd.	CT81	1500pF,250Vac		135256
Alternate	Shantou High-New Technology Development Zone Songtian Enterprise Co., Ltd.	CD.	1500pF,400Vac		40025754
Alternate	Walsin Technology Corp	AH	1500pF,400Vac;		40001804

## List of key parts

14	TABLE: list of critical components and materials				P
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Approval/ Reference
Alternate	TDK-EPC Corporation, Capacitors Group Circuit Devices Business Group	CD	1500pF,250Vac		124321
Opto-coupler P103, P102	COSMO Electronics Corp.	K1010	5000Vac		101347
Alternate	Toshiba Corporation Semicon. Co. Discrete Div.	TLP781	5000Vac		40021173
Alternate	Sharp Corporation	PC123	5000Vac		40008087
Alternate	Lite-On Technology Corporation	LTV-817	5000Vac		40015248
PCB	Huizhou Shenghua Industrial Co., Ltd.	SH-04	94V-0,Thick 1.6mm		E202404
Alternate	Boluo KONKA Printed Board Co., Ltd.	KK4	94V-0,Thick 1.6mm		E211940
Alternate	Shenzhen Zhong Luo Electronics Co.,Ltd.	ZL-03A	94V-0,Thick 1.6mm		E255554
Alternate	Shenzhen Zhong Luo Electronics Co.,Ltd.	ZL-03	94V-0,Thick 1.6mm		E255554
Alternate	Boluo KONKA Printed Board Co., Ltd.	KK6	94V-0,Thick 1.6mm		E211940
Alternate	Boluo KONKA Printed Board Co., Ltd.	KK1	94V-0,Thick 1.6mm		E211940
Alternate	Boluo KONKA Printed Board Co., Ltd.	KK1	94V-0,Thick 1.6mm		E211940
Alternate	Huizhou Shenghua Industrial Co., Ltd.	SH-05	94V-0,Thick 1.6mm		E202404
Alternate	Huizhou Shenghua Industrial Co., Ltd.	SH-01	94V-0,Thick 1.6mm		E202404
Alternate	Huizhou Shenghua Industrial Co., Ltd.	SH-01	94V-0,Thick 1.6mm		E202404

## List of key parts

14	TABLE: list of critical components and materials					P
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Approval/ Reference	
Line Filter Inductor L2	Shenzhen Megmeet Electrical Technology Co., Ltd.	MLT019A-L2	130℃,Min. 4.5mH			
Line Filter Inductor L1	Shenzhen Shi Yamaxi Electronic Co., Ltd.	MIP260B-1-L1 02	130℃,Min.20mH			
Alternate	Shenzhen Transformer Electronics Co., Ltd.	MIP260B-1-L1 02	130℃,Min.20mH			
Alternate	Shenzhen Haixinxing Electronic Co., Ltd.	MIP260B-1-L1 02	130℃,Min.20mH			
Power Factor Correction (PFC) Inductor L5	Shenzhen Jing Ye Magnetism Electronic Co., Ltd.	MIP320G-B-L 5	130℃			
Transformer T7	Shenzhen Shi Yamaxi Electronic Co., Ltd.	MIP260B-T10 2	130℃			
Alternate	Shenzhen Transformer Electronics Co., Ltd.	MIP260B-T10 2	130℃			
Transformer T5	Shenzhen Shi Yamaxi Electronic Co., Ltd.	MIP320M-T5	130℃			
Alternate	Shenzhen Jing Ye Magnetism Electronic Co., Ltd.	MIP320M-T5	130℃			
Transformer T8	Shenzhen Shi Yamaxi Electronic Co., Ltd.	MIP320M-T8	130℃			
Alternate	Shenzhen Jing Ye Magnetism Electronic Co., Ltd.	MIP320M-T8	130℃			
Transformer T9	Shenzhen Shi Yamaxi Electronic Co., Ltd.	MIP320M-T9	130℃			

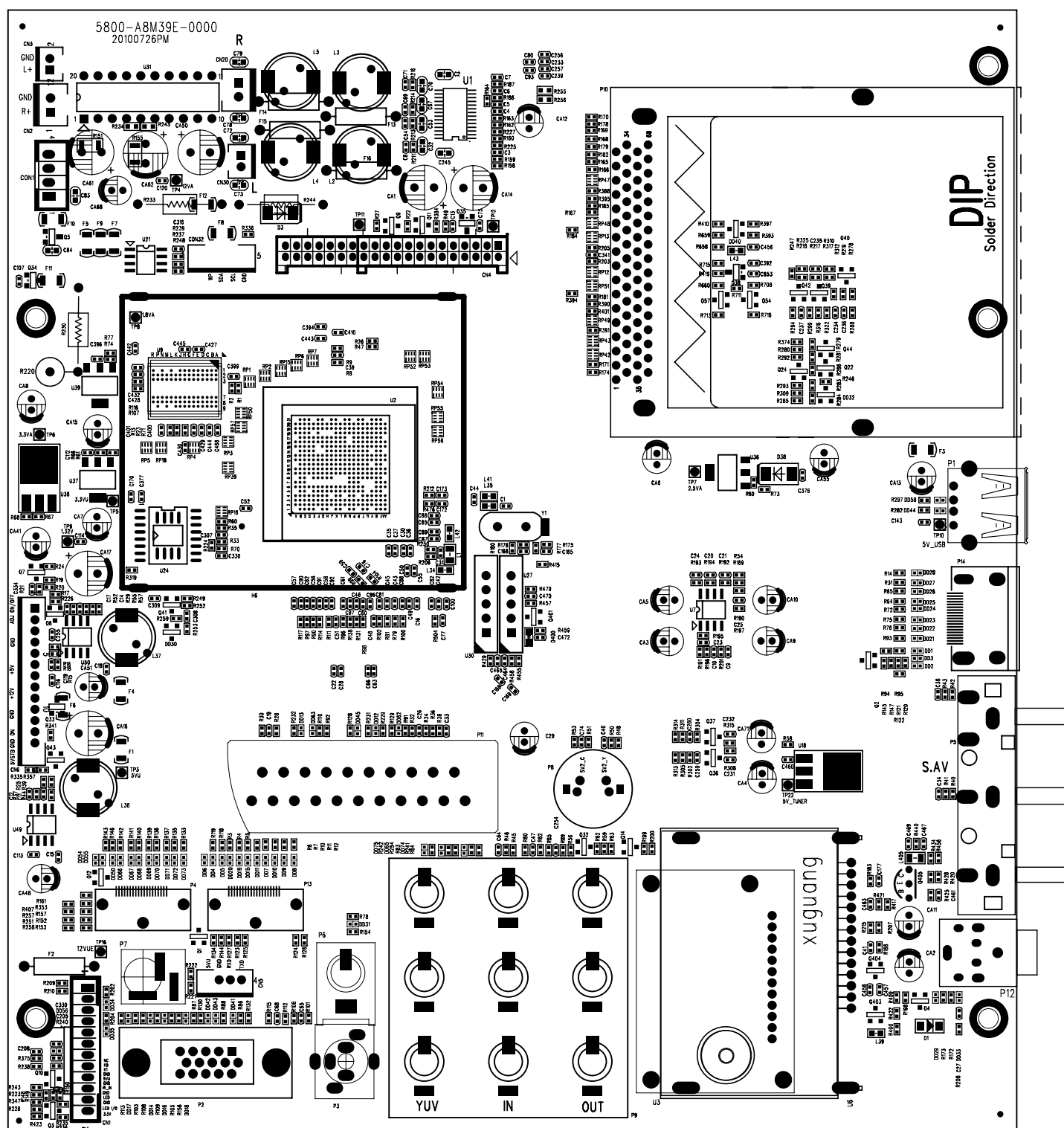
## List of key parts

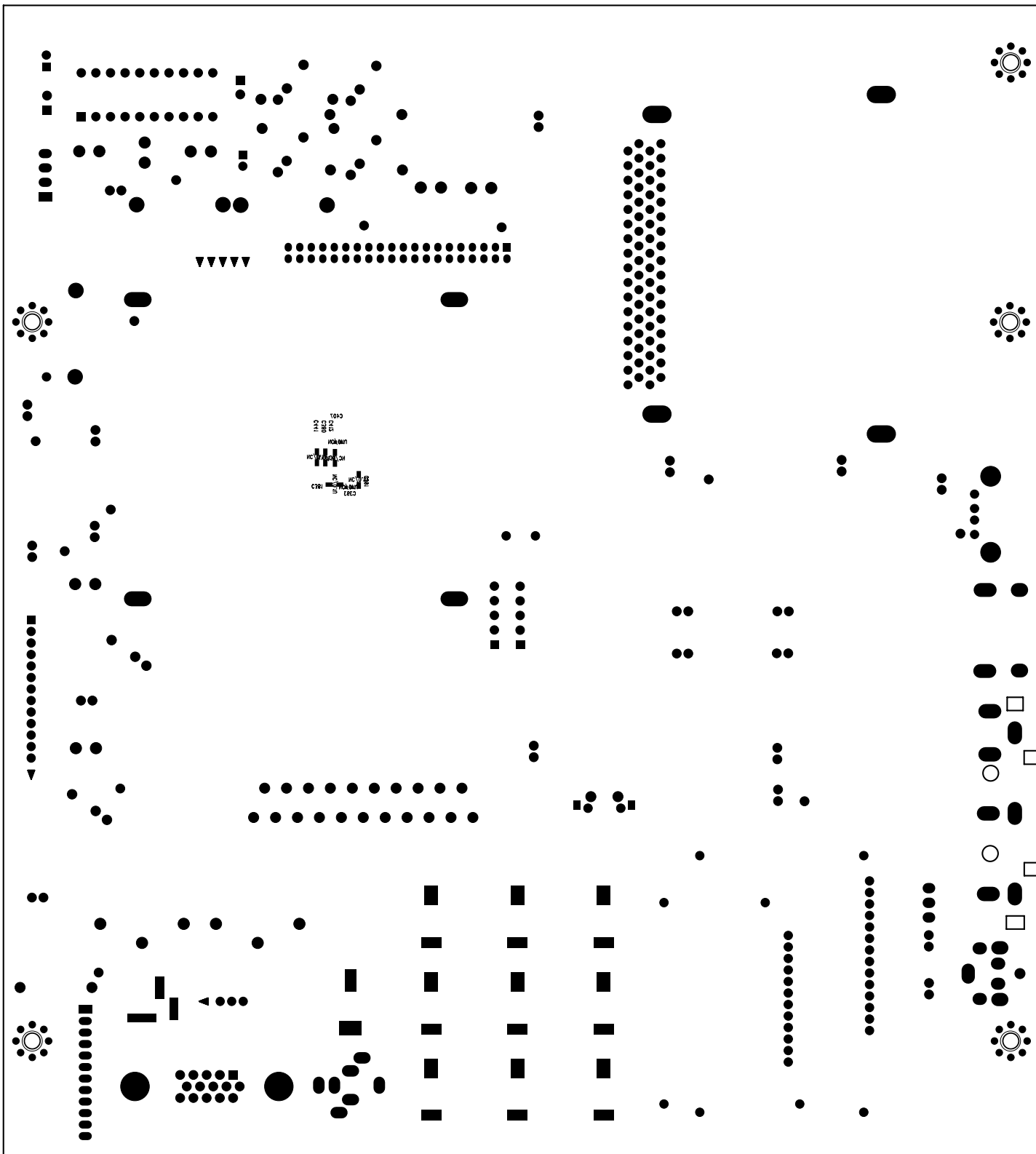
14	TABLE: list of critical components and materials					P
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Approval/ Reference	
Alternate	Shenzhen Jing Ye Magnetism Electronic Co., Ltd.	MIP320M-T9	130℃			
Transformer T1	Taiwan Thick-Film Ind. Corp.	MIP320G-B-T 1	130℃			
NTC Thermistor RT1	Thinking Electronic Industrial Co., Ltd.	SCK	2.5Ω/6A/Φ14±1m m		TUV: R50050155	
Alternate	Thinking Electronic Industrial Co., Ltd.	SCK	2.5Ω/6A/Φ14±1m m		TUV: R50050155	
Alternate	UL:NANJING SHIHENG ELECTRONICS CO LTD	MF72	2.5Ω/6A/Φ14±1m m		E241319	
Alternate	UL:EPCOS OHG	UL:S236; CQC:ICL S236	2.5Ω/6A/Φ14±1m m		E69802	
Metal Oxide Varistor (MOV) ZR1	Thinking Electronic Industrial Co., Ltd.	TVR10681	680VDC		005944	
Alternate	Centra Science Corp.	CNR-10D681 K	680VDC		40008220	
Alternate	Shantou High-New Technology Development Zone Songtian Enterprise Co., Ltd.	STE-10D681K	680VDC		40023049	
1) an asterisk indicates a mark which assures the agreed level of surveillance.						



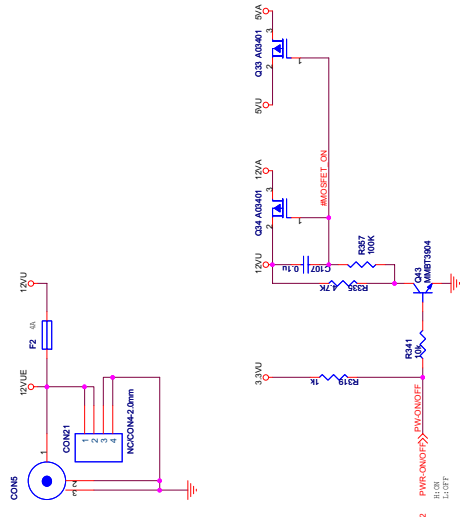




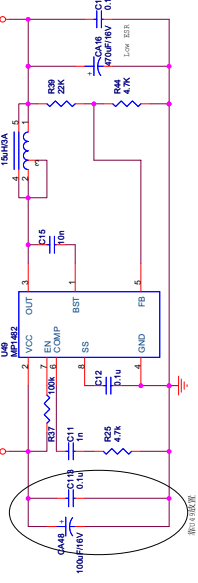




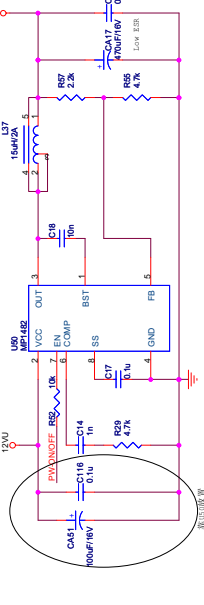
## Power Input



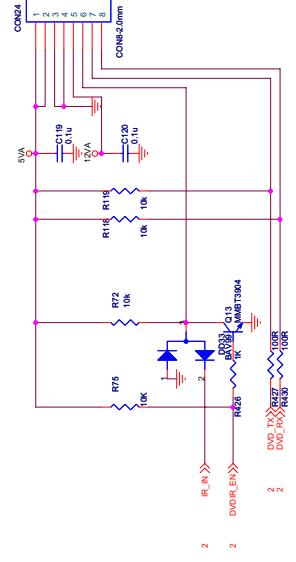
## 5V DC-DC



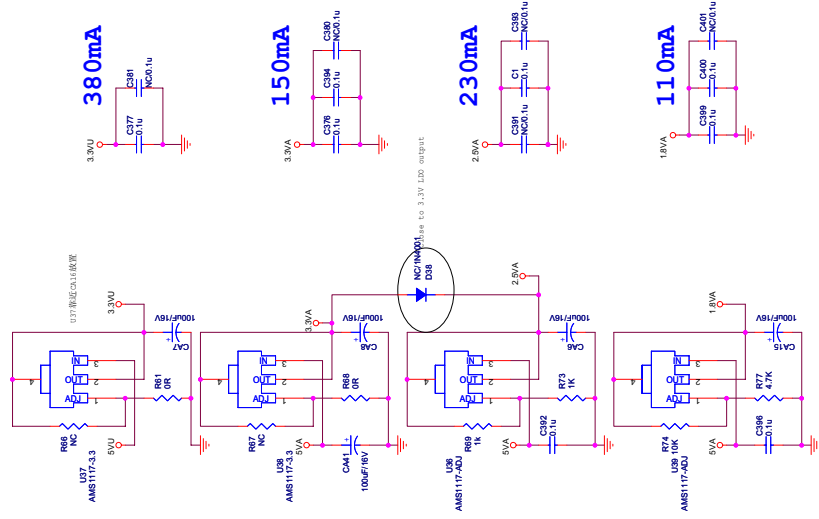
1.32V DC-DC



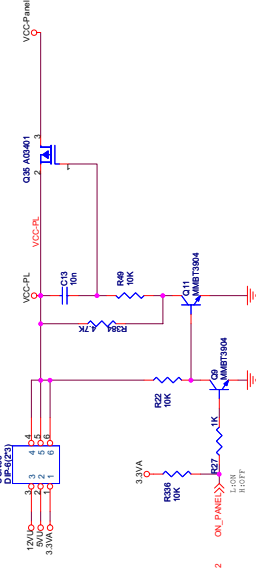
## DVD Power Interface



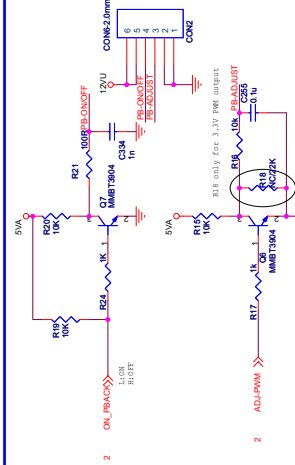
**MST Power supply**



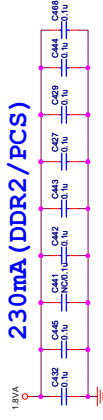
## PANEL POWER



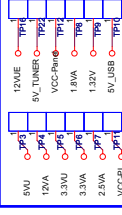
## Inverter Interface



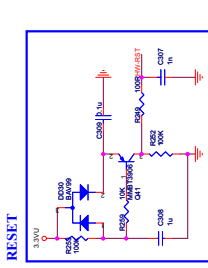
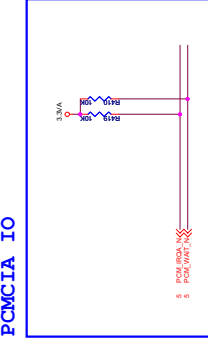
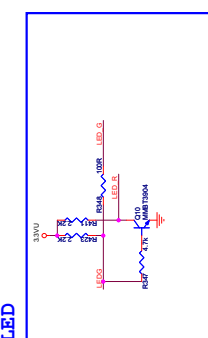
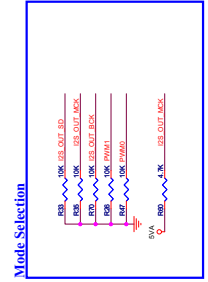
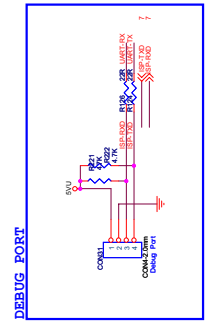
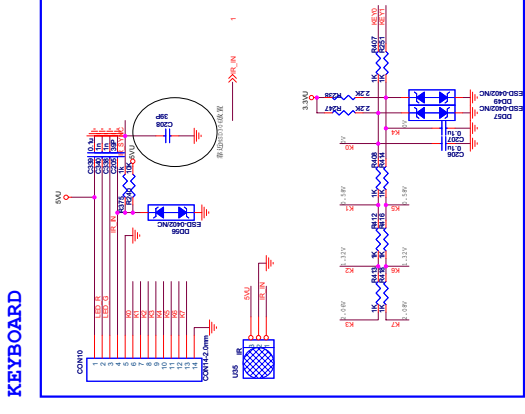
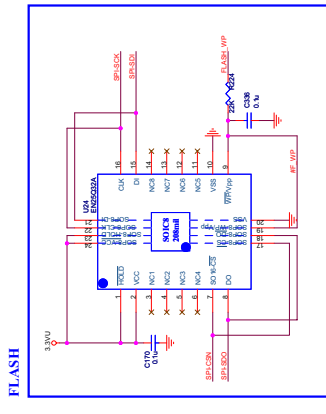
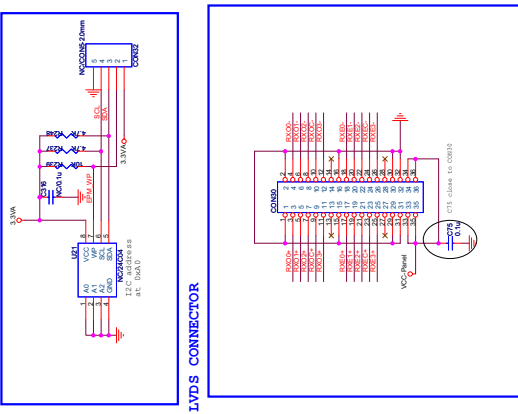
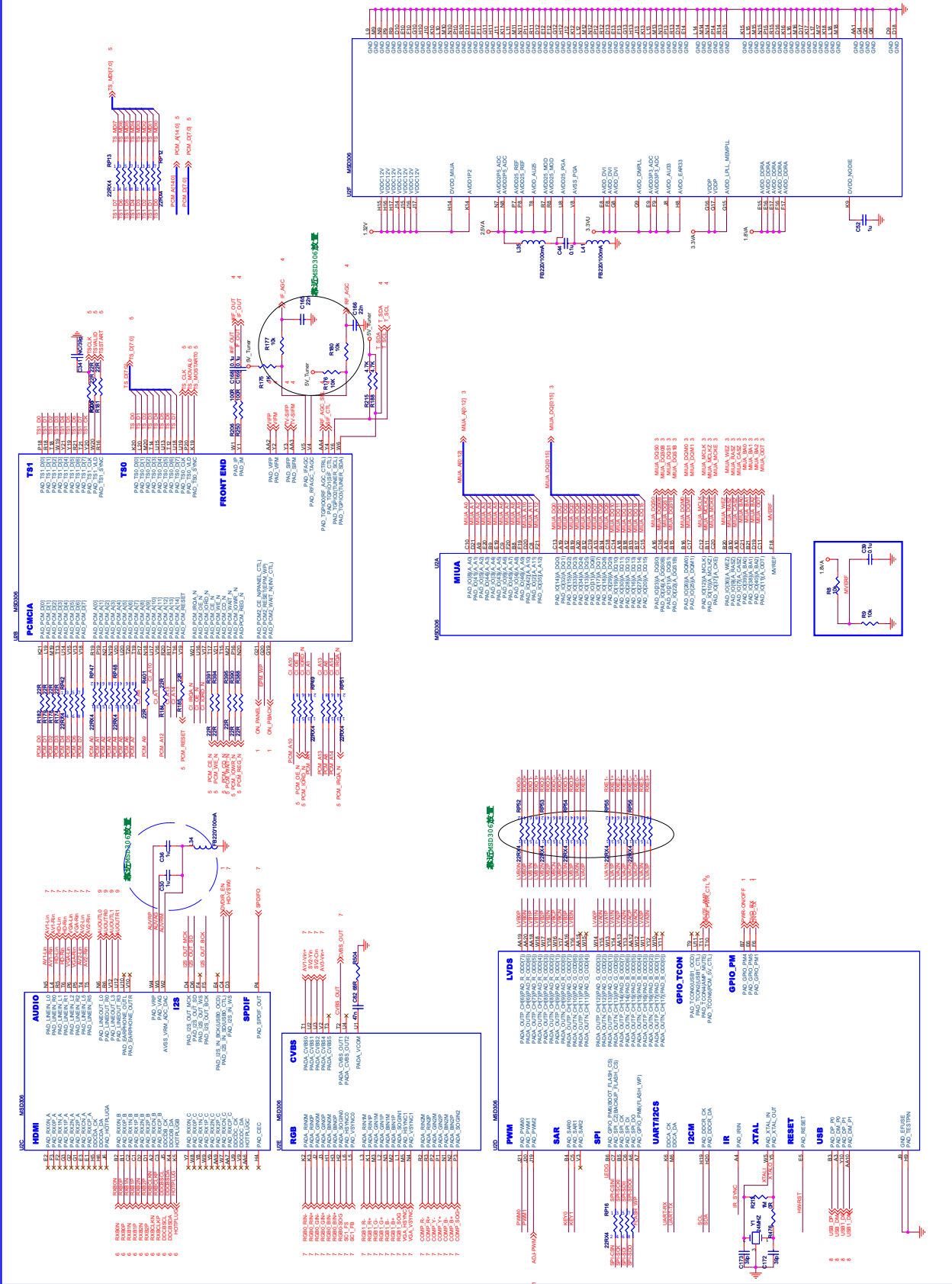
## 230mA (DDR2/PCS)

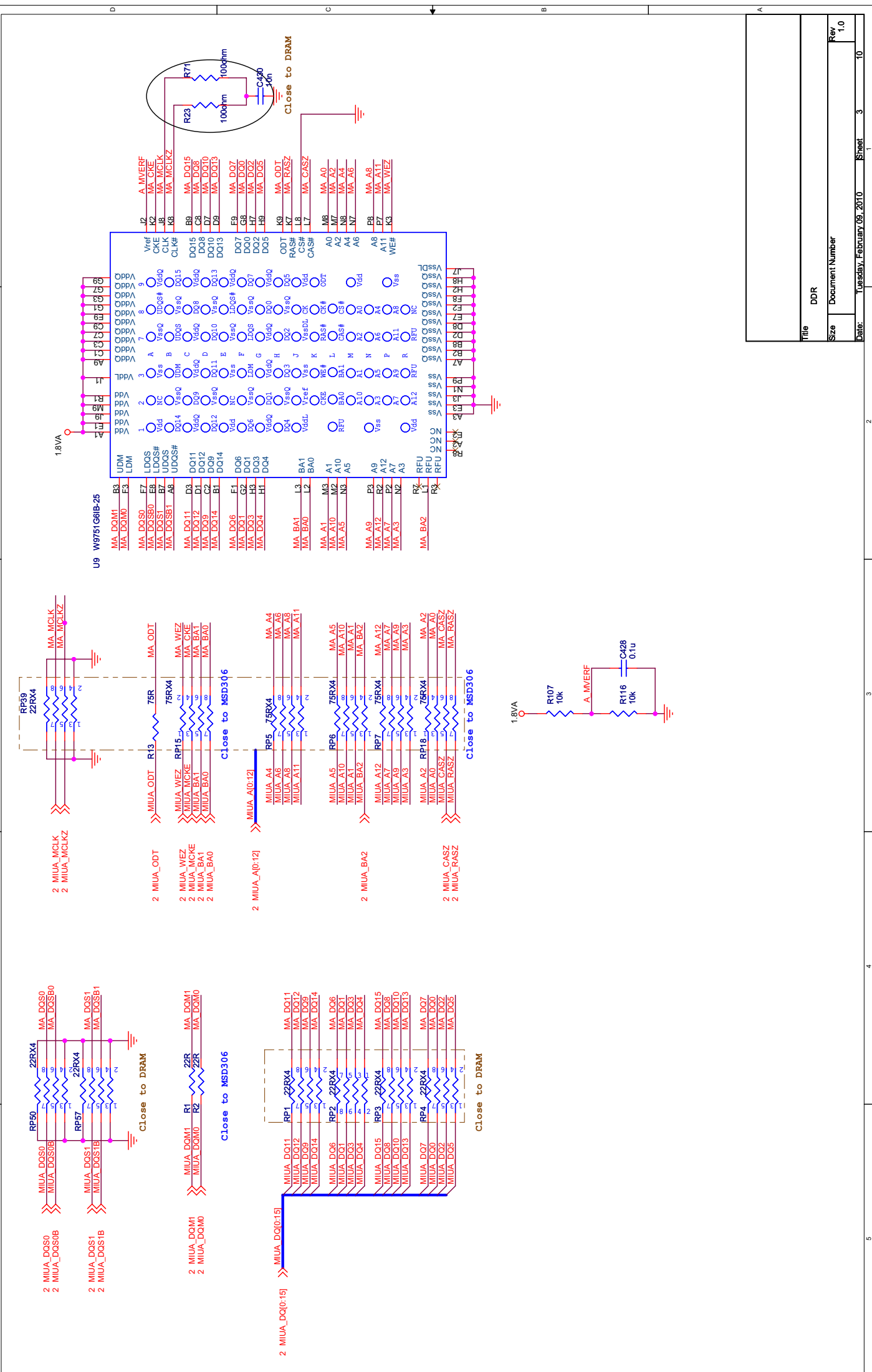


## Power Test Point



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Date	Issued	By	45
	December 25, 2005		

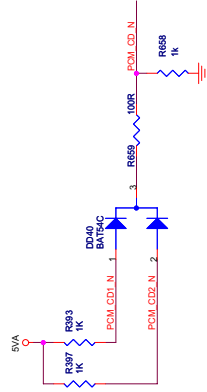




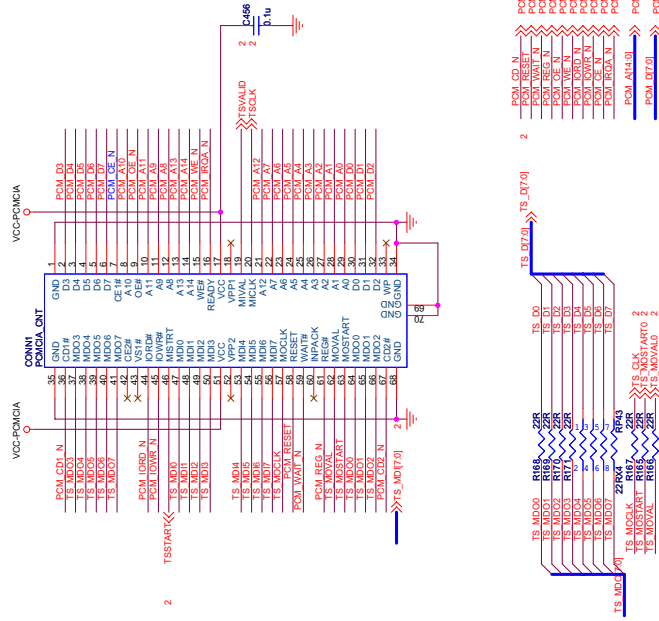
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Rev	Rev	1.0



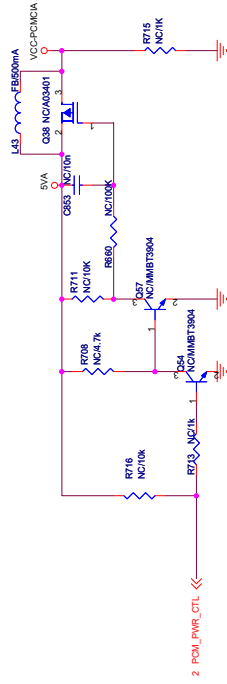
**CARD DETECT**

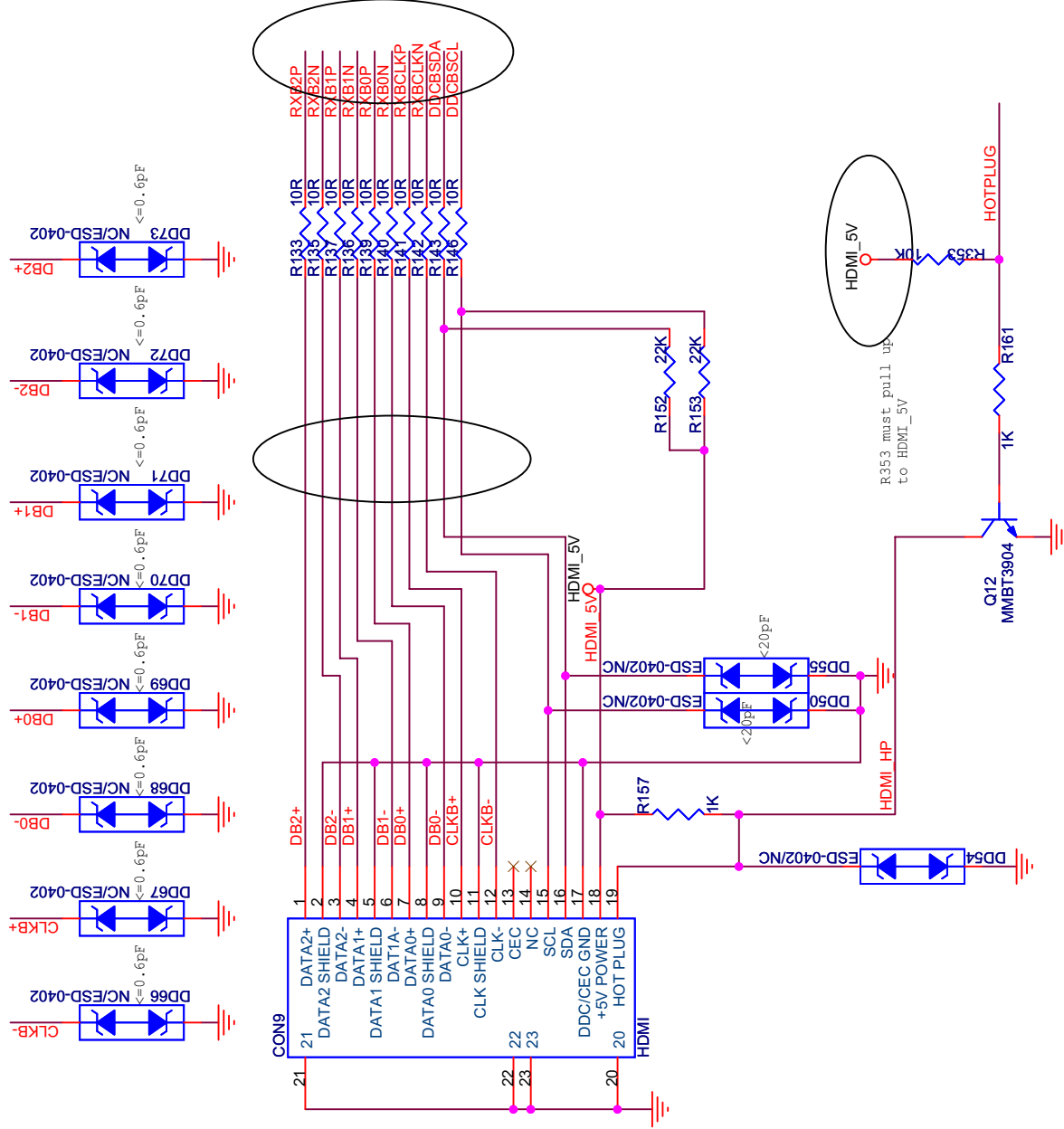


## PCMCIA Connector



**PWR CTRL**





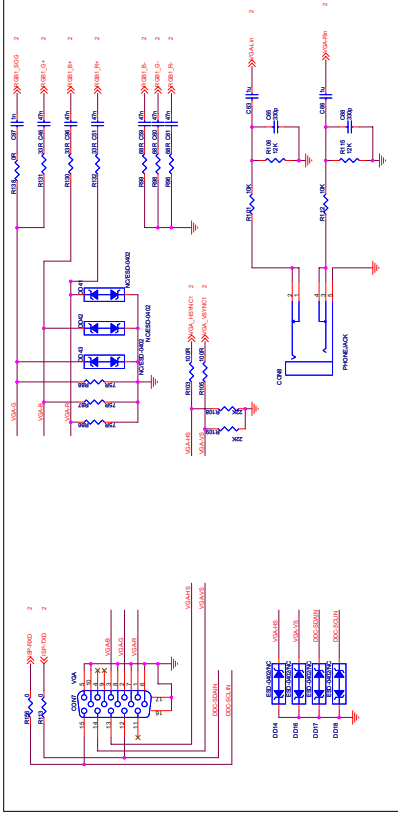
2	RXB0N	2	RXB0N
2	RXB0P	2	RXB0P
2	RXB1N	2	RXB1N
2	RXB1P	2	RXB1P
2	RXB2N	2	RXB2N
2	RXB2P	2	RXB2P
2	RXBCLKN	2	RXBCLKN
2	RXBCLKP	2	RXBCLKP
2	DDCBSCL	2	DDCBSCL
2	DDCBSDA	2	DDCBSDA

HOTPLUG <<HOTPLUG 2

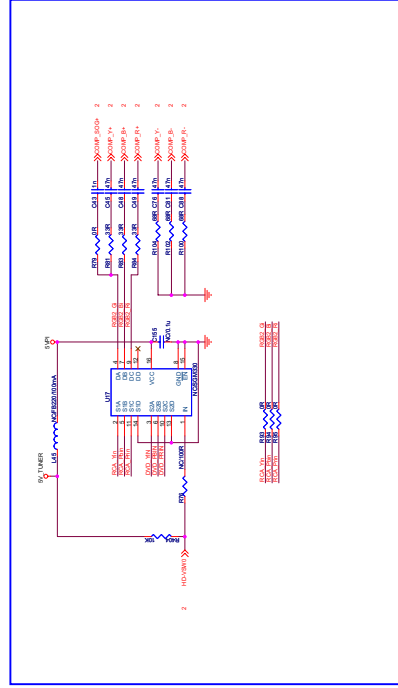
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Size	Document Number	Rev	1.0
Date:	Tuesday, January 05, 2010	Sheet	6 10



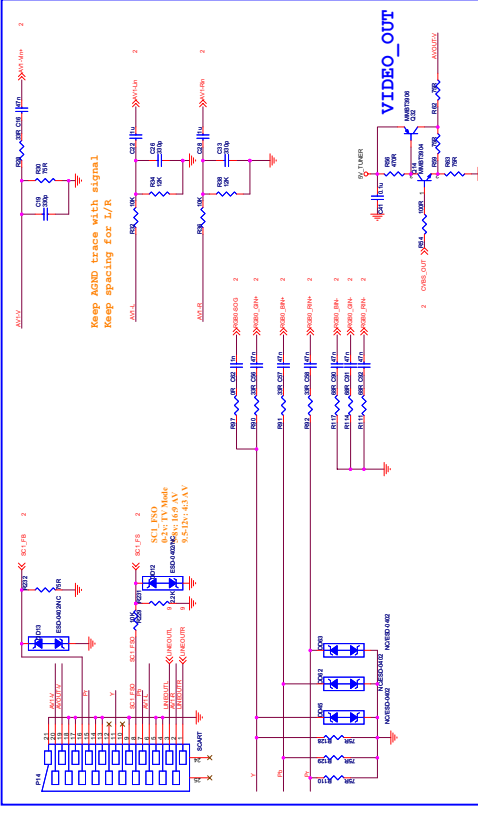
VGA INPUT



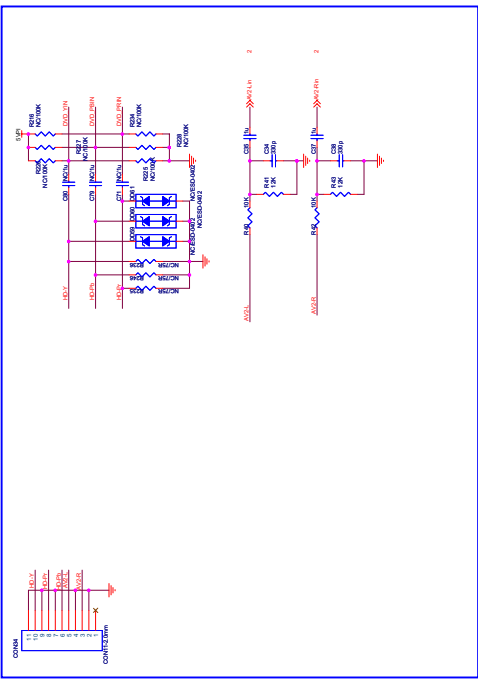
Video switch (Option for Comb DVD)



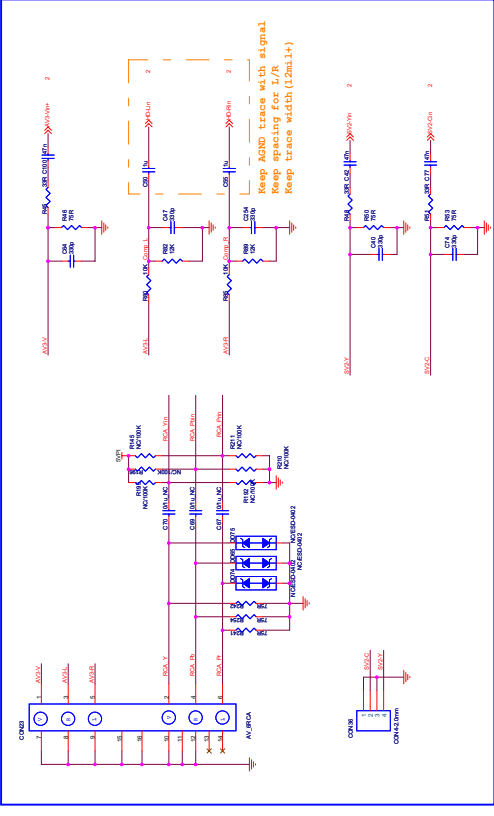
SCART



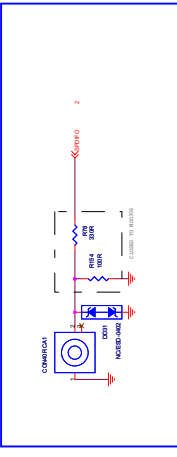
Comb DVD interface (Optional)



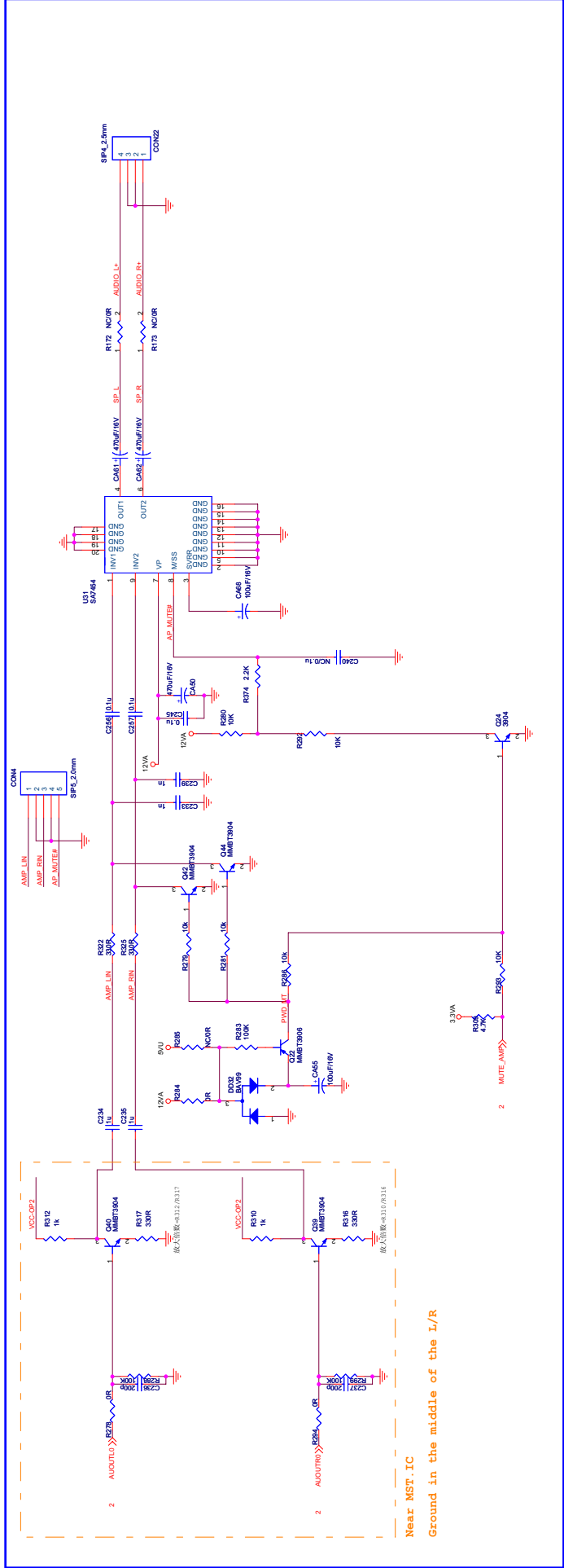
AV Input



SPDIF Output

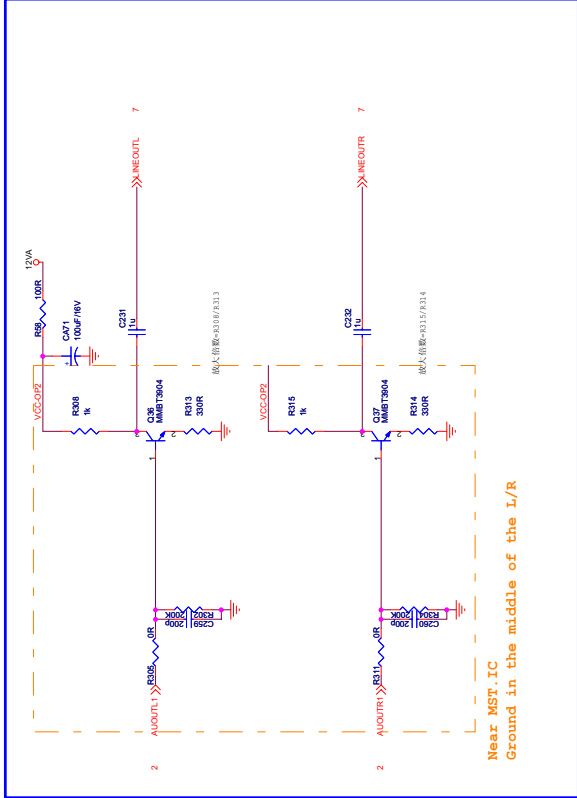


REV	AWN
DATE	2007/07/07
DES	WANG, WANG, WANG, WANG

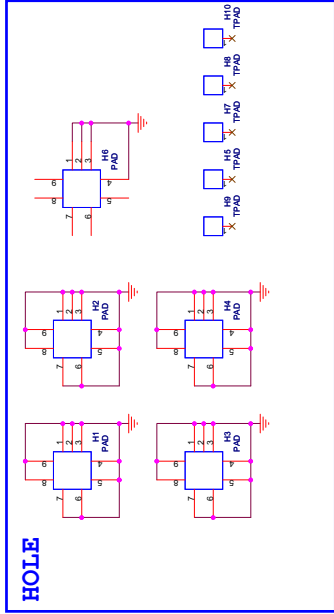
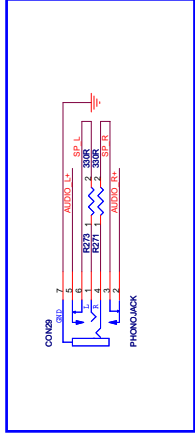


Near MST IC  
Ground in the middle of the L/R

## AUDIO pre-ap



Near MST IC  
Ground in the middle of the L/R



# Service Adjustments

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## 1. Summary:

LCD TV including LCD TV sets and computer displays ,It's a high display quality and small size, light weight and good at the same time with power-saving features and no radiation

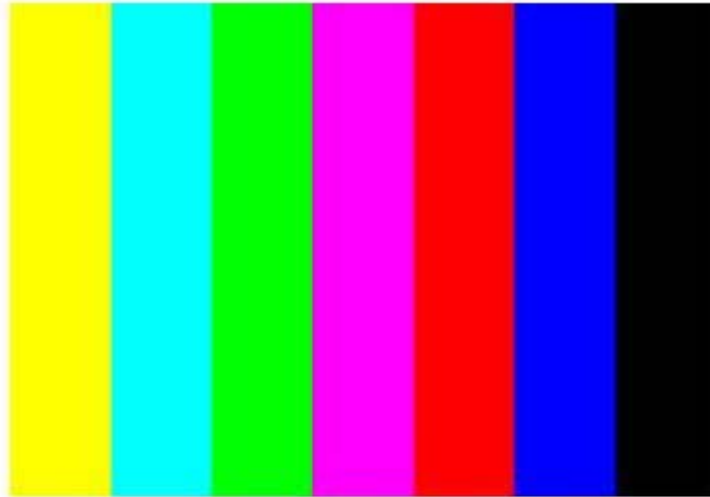
## 2. Method of entering factory menu

Method : Press SOURCE button, then press 2580.

## 3. ADC Adjust Method:

### 1) YPbPR Source

Input 100% color bar pattern signal, select AUTOTUNE item, Press  $\Rightarrow$  button to auto adjust the ADC value, when show "OK" finished.



### 2) VGA Source:

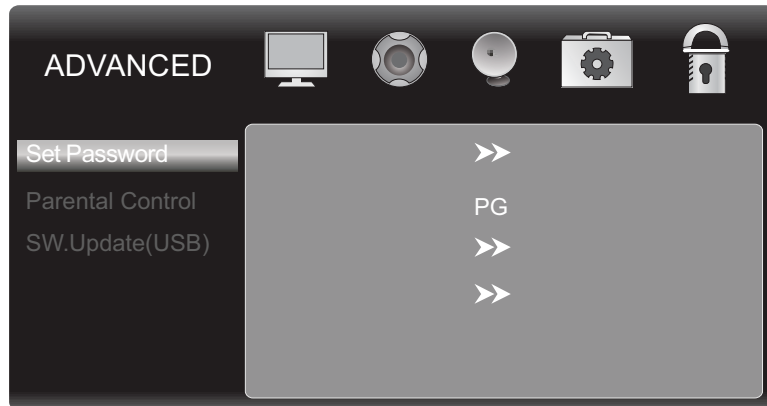
Input tessellated white - black signal, select AUTOTUNE item, press  $\Rightarrow$  button to auto adjust the ADC value, when show "OK" finished.



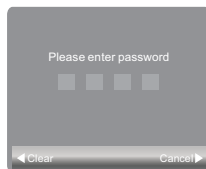
# Software Update(USB)

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1. In the TV Mode, Press "MENU" button, the press "▶" button to ADVANCED.



2. Press "▼" button, Input the password "0000".



3. Press "▼" button, Select the SW.Update(USB), Press "OK" button.



4. Press "◀" (Yes) button, the please wait for 1 minute.

